

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	"5423123".pn.	US-PGPUB; USPAT	ADJ	ON	2009/03/30 16:56
S2	1	"3752225".pn.	US-PGPUB; USPAT	ADJ	ON	2009/03/30 16:59
S3	0	FR "1181042"	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	ADJ	ON	2009/03/30 17:12
S4	10	"1181042"	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	ADJ	ON	2009/03/30 17:13
S5	5	"2,544,538".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	ADJ	ON	2009/03/30 17:15
S6	2	"5,363,654".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	ADJ	ON	2009/03/31 06:59
S7	2	"5,249,419".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	ADJ	ON	2009/03/31 07:12
S8	2	"5,069,034".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	ADJ	ON	2009/03/31 07:15
S9	2	"5,216886".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	ADJ	ON	2009/03/31 07:20

## EAST Search History

S10	0	"10" "585162"	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	ADJ	ON	2009/03/31 07:23
S11	17	"10" "585162"	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	AND	ON	2009/03/31 07:23
S12	1753	415/115.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/03/31 09:05
S13	21	415/209.2.ccls. and (plate or planar).ab.	US-PGPUB; USPAT	ADJ	ON	2009/03/31 09:09
S14	2	415/209.2.ccls. and (thermal and housing).ab.	US-PGPUB; USPAT	ADJ	ON	2009/03/31 09:23
S15	324	415/209.2.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/03/31 09:25
S16	471	415/189	US-PGPUB; USPAT	ADJ	ON	2009/03/31 09:38
S17	237	415/189.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/03/31 09:38
S18	2	("3619079").URPN.	USPAT	ADJ	ON	2009/03/31 11:03
S19	535	415/191.ccls.	USPAT	ADJ	ON	2009/03/31 11:07
S20	1	"5927942".pn.	USPAT	ADJ	ON	2009/03/31 13:04
S21	1	"5380150".pn.	USPAT	ADJ	ON	2009/03/31 13:09
S22	203	181/213.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/03/31 13:31
S23	0	F01D 25/24.ipc.	DERWENT	ADJ	ON	2009/03/31 13:52
S24	0	F01D25/24.ipc.	DERWENT	ADJ	ON	2009/03/31 13:52
S25	0	(F01D 25/24).ipc.	DERWENT	ADJ	ON	2009/03/31 13:52
S26	0	F01D.ipc.	DERWENT	ADJ	ON	2009/03/31 13:53
S30	88945	(engine or turbine or combustion) with (casing or shroud or housing) or (guide vane) or (gas channel)	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:03
S31	2319291	(radi\$4 or outer border or endwall or circumferen\$6)	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:05
S32	1006068	hot gas or combustion gases or thermal	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:06
S33	32034	S30 and S32	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:07
S34	22195	S30 and S32 and S31	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:07

## EAST Search History

S35	864	S30 and S32 and S31 and heat shield	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:07
S36	3080	S30 SAME S32 SAME S31	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:08
S37	1897	S30 with S32 SAME S31	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:09
S38	124	(S30 with S32) SAME S31 and heat shield	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:09
S39	142	415/173.1 and (thermal or heat).ab.	US-PGPUB; USPAT	ADJ	ON	2009/03/31 14:41
S40	2	(thermal shield).ab. and "415" and (channel or guide or corrugate\$2)	US-PGPUB; USPAT	ADJ	ON	2009/03/31 15:03
S41	12	((thermal or heat) with shield).ab. and "415" and (channel or guide or corrugate\$2).ab.	US-PGPUB; USPAT	ADJ	ON	2009/03/31 15:04
S42	15	("3373480"   "4333216"   "4534503"   "4604780"   "4807342"   "4901552"   "5024369"   "5204161"   "5226578"   "5300367").PN. OR ("5423123").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 06:55
S43	17	("20030131980"   "4494316"   "4526226"   "4573865"   "5001896"   "5265409"   "5329761"   "5391052"   "5423123"   "5424914"   "5782294"   "5816777"   "6237344"   "6554563"   "6779597"   "7017334").PN. OR ("7270175").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 06:58
S44	1	"5,435,139".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 07:14
S45	40	("3422620"   "4071194"   "4422300"   "4695247"   "4864827"   "4901522"   "4912922"   "5000005"   "5216886").PN. OR ("5435139").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 07:21
S46	367	60/757.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 07:23
S47	188	60/757.ccls. and (layer\$2 or ((double or multiple) with wall) or channel or guides)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 07:32
S48	5	"1458204"	EPO; DERWENT	ADJ	ON	2009/04/01 08:00
S49	0	"1458204"	FPRS	ADJ	ON	2009/04/01 08:01
S50	0	"2574859"	EPO	ADJ	ON	2009/04/01 08:07
S51	0	"2574859"	FPRS; EPO	ADJ	ON	2009/04/01 08:07
S52	29	"4614082"	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 08:07

## EAST Search History

S53	1	"4614082".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 08:07
S54	17	("2651912"   "3422620"   "4614082"   "4628694"   "4773227").PN. OR ("5069034").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 08:33
S55	12	("4071194"   "4854122"   "4866942"   "5069034"   "5435139"   "5697213"   "5704208"   "5799491").PN. OR ("6041590").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 09:12
S56	1	"4,414,816".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 09:36
S57	17	("2684572"   "2919549"   "3016703"   "3422620"   "4132066"   "4253301").PN. OR ("4414816").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 09:36
S58	25	("2458066"   "2617255"   "2775094"   "3154914"   "3545202"   "3572031").PN. OR ("3706203").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 09:53
S59	1	"3,706,203".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 10:00
S60	1	"4,302,941".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 10:01
S61	43	("2268464"   "2609040"   "2617255"   "2918793"   "2919549"   "4236378").PN. OR ("4302941").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 10:02
S62	2	"2,610,467".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 10:22
S63	19	("2610467"   "3169367"   "3545202").PN. OR ("3702058").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 10:30

## EAST Search History

S64	51	("20020152751"   "20030145604"   "20050000226"   "20050081527"   "20050097890"   "20060005543"   "20060053798"   "20070253815"   "3554663"   "3584972"   "3606572"   "3619082"   "4158949"   "4195476"   "4296606"   "4302940"   "4315406"   "4767268"   "5223320"   "5403159"   "5419681"   "5435139"   "5598697"   "5690472"   "5758503"   "5775108"   "5782294"   "5941076"   "5967752"   "5997251"   "6029455"   "6089822"   "6145319"   "6205789"   "6255000"   "6383602"   "6408628"   "6491496"   "6546733"   "6606861"   "6627019"   "6769866"   "6868675"   "6964170"   "6981358"   "7036316"   "7140185"   "7146815"   "7270175").PN. OR ("7464554").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 10:38
S65	1	"6,255,000".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 10:49
S66	19	("3199294"   "3500639"   "3854285"   "4422300"   "4512159"   "4848089"   "5055032"   "5083424"   "5103638"   "5129447").PN. OR ("5265409").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 10:55
S67	169610	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumped or wrinkled or ridged or grooved) and (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage) with (plate or plan\$2 or flat or level or even or step or parallel) and (thermal or heat shield or hot gas)	US-PGPUB; USPAT; USOCR	OR	ON	2009/04/01 11:32
S68	6522	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumped or wrinkled or ridged or grooved) with (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage) with (plate or plan\$2 or flat or level or even or step or parallel) and (thermal or heat shield or hot gas)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 11:33
S69	381	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumped or wrinkled or ridged or grooved) with (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage) with (plate or plan\$2 or flat or level or even or step or parallel) and (thermal or heat shield or hot gas) and turbine	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 11:34

## EAST Search History

S70	769	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumpled or wrinkled or ridged or grooved) with (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage) with (plate or plan\$2 or flat or level or even or step or parallel) and (thermal or heat shield or hot gas) and (turbine or engine) and (radi\$2 or circumferen\$5 or ring)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 11:37
S71	251	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumpled or wrinkled or ridged or grooved) with (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage) with (plate or plan\$2 or flat or level or even or step or parallel) and (thermal or heat shield or hot gas) and (turbine) and (radi\$2 or circumferen\$5 or ring)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 11:37
S72	504	415/173.7.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 11:49
S73	9	415/173.7.ccls. and (corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumpled or wrinkled or ridged or grooved) with (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 11:49
S74	10	("2812159"   "2962809"   "3501246"   "3941500"   "4127357").PN. OR ("4239451").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/01 11:51
S75	244	415/136.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/04/01 14:19
S76	211	415/138.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/04/01 16:13
S77	1	"6173561".pn.	US-PGPUB; USPAT	ADJ	ON	2009/04/02 07:27
S78	207	415/139.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/04/02 07:30
S79	39	("2488867"   "2932485"   "2942844"   "3043564"   "3062499"   "3066911"   "3295751"   "3295824"   "3363416"   "3443791"   "3730640"   "3765791"   "3824034"   "3957391"   "3965066"   "4274805"   "4391565").PN. OR ("4566351").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/02 07:41
S80	211	415/138.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/04/02 07:49

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S81	42	("3443791"   "3656862"   "3742705"   "3800864"   "3807891"   "3966352"   "3972181"   "4019320"   "4023919"   "4101242"   "4217755"   "4230436"   "4279123"   "4314791"   "4337016"   "4363599").PN. OR ("4553901").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/02 08:05
S82	295	415/189.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/02 08:27
S83	89035	(engine or turbine or combustion) with (casing or shroud or housing) or (guide vane) or (gas channel)	US-PGPUB; USPAT	ADJ	ON	2009/04/02 08:41
S84	2321689	(radi\$4 or outer border or endwall or circumferen\$6)	US-PGPUB; USPAT	ADJ	ON	2009/04/02 08:41
S85	1007197	hot gas or combustion gases or thermal	US-PGPUB; USPAT	ADJ	ON	2009/04/02 08:41
S86	19794	S83 and S85 and S84 and (segments or parts or pieces)	US-PGPUB; USPAT	ADJ	ON	2009/04/02 08:41
S87	10349	S86 and ring	US-PGPUB; USPAT	ADJ	ON	2009/04/02 08:41
S88	1579	S83 and S85 and S84 and (segments or parts or pieces) NEAR3 ring	US-PGPUB; USPAT	ADJ	ON	2009/04/02 08:43
S89	575	S83 and S85 and S84 and (segments or parts or pieces) NEAR3 ring and "415".clas.	US-PGPUB; USPAT	ADJ	ON	2009/04/02 08:43
S90	359	S83 and S85 and S84 and (segments or parts or pieces) NEAR3 ring and "415".clas. and (S84 near3 ring)	US-PGPUB; USPAT	ADJ	ON	2009/04/02 08:46
S91	357	S83 and S85 and S84 and (segments) NEAR3 ring and "415".clas.	US-PGPUB; USPAT	ADJ	ON	2009/04/02 08:58
S92	0	"2002" "0197153"	US-PGPUB; USPAT	ADJ	ON	2009/04/02 14:20
S93	1	"0197153"	US-PGPUB; USPAT	ADJ	ON	2009/04/02 14:21
S94	0	"09778011"	US-PGPUB; USPAT	ADJ	ON	2009/04/02 14:22
S95	4	"778011"	US-PGPUB; USPAT	ADJ	ON	2009/04/02 14:22
S96	19	"887011"	US-PGPUB; USPAT	ADJ	ON	2009/04/02 14:23
S97	6	"887011"	US-PGPUB	ADJ	ON	2009/04/02 14:23
S98	13	("2605997"   "3067983"   "3075744"   "3423071"   "3841787"   "4511306"   "4639189"   "5118120"   "5961278").PN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/02 14:36
S99	1	"4361010".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/02 15:00

## EAST Search History

S10 0	1	"4655682".pn.	US-PGPUB; USPAT	ADJ	ON	2009/04/02 17:00
S10 1	1	"2995294".pn.	US-PGPUB; USPAT	ADJ	ON	2009/04/06 07:37
S10 2	2	"2995294".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 07:38
S10 3	2	"3043103".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 07:50
S10 4	2	"3104091".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 08:20
S10 5	1	"5069034".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 08:31
S10 6	1	"4832568".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 08:32
S10 7	1	"4868963".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 09:26
S10 8	11	"843090"	USPAT; EPO	ADJ	ON	2009/04/06 09:37
S10 9	1	"6217282".pn.	US-PGPUB; USPAT	ADJ	ON	2009/04/06 12:37
S11 0	211	MTU Aero Engines GmbH.as.	US-PGPUB; USPAT	ADJ	ON	2009/04/06 12:46
S11 1	212	MTU Aero Engines GmbH	US-PGPUB; USPAT	ADJ	ON	2009/04/06 12:46
S11 2	212	MTU Aero Engines	US-PGPUB; USPAT	ADJ	ON	2009/04/06 12:47
S11 3	1301	MTU Aero Engines	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/06 12:53
S11 4	34	S113 and "415".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/06 12:54



## EAST Search History

S11 5	0	S113 and ("181".clas. or "60"".clas")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/06 12:57
S11 6	12	S113 and ("181".clas. or "60".clas.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/06 12:57
S11 7	2	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumpled or wrinkled or ridged or grooved) with (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage) with (plate or plan\$2 or flat or level or even or step or parallel) and (thermal or heat shield or hot gas) and (turbine) and (radi\$2 or circumferen\$5 or ring)	FPRS; EPO; JPO; IBM_TDB	ADJ	ON	2009/04/06 12:59
S11 8	3	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumpled or wrinkled or ridged or grooved) same (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage) same (plate or plan\$2 or flat or level or even or step or parallel) and (thermal or heat shield or hot gas) and (turbine) and (radi\$2 or circumferen\$5 or ring)	FPRS; EPO; JPO; IBM_TDB	ADJ	ON	2009/04/06 13:01
S11 9	30	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumpled or wrinkled or ridged or grooved) same (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage) same (plate or plan\$2 or flat or level or even or step or parallel) same (thermal or heat shield or hot gas) and (radi\$2 or circumferen\$5 or ring)	FPRS; EPO; JPO; IBM_TDB	ADJ	ON	2009/04/06 13:02

## EAST Search History

S12 0	103	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumped or wrinkled or ridged or grooved) same (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage or casing or plate or plan\$2 or flat or level or even or step or parallel) same (thermal or heat shield or hot gas) and (radi\$2 or circumferen\$5 or ring)	FPRS; EPO; JPO; IBM_TDB	ADJ	ON	2009/04/06 13:08
S12 1	133	(corrugated or channelled or creased or crinkled or crumpled or flexed or fluted or folded or furrowed or puckered or roughened or rumped or wrinkled or ridged or grooved) same (housing or liner or structur\$2 or shield\$3 or guid\$3 or duct or passage or casing or plate or plan\$2 or flat or level or even or step or parallel) same (thermal or heat shield or hot gas) and (radi\$2 or circumferen\$5 or ring)	DERWENT	ADJ	ON	2009/04/06 13:11
S12 2	0	415/190.ccls.	DERWENT	ADJ	ON	2009/04/06 14:10
S12 3	204	415/190.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 14:10
S12 4	405	415/209.2.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 14:19
S12 5	383	415/209.3.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 14:35
S12 6	405	415/209.2.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 14:36
S12 7	335	415/209.4.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 15:23
S12 8	27	("3442442"   "3849023"   "3957391"   "4009969"   "4386989"   "4417854"   "4422827"   "4429883").PN. OR ("4655682").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/04/06 15:29